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Informal Discussion
STATE WATER RESOURCES CONTROL BOARD
STATE OF CALIFORNIA

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Subject: Legal Topics Regarding Water Quality Control Planning for the Bay-Delta Estuary) Phase II

Part of FOIA LIST 2 (Gray 3)

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Held in
Bonderson Building
Sacramento, California

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Monday, February 27, 1989
10:00 a.m.

ALICE BOOK
CERTIFIED SHORTHAND REPORTER
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A P P E A R A N C E S

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W. DON MAUGHAN, Chairman

DARLENE RUIZ, Vice Chair

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DANNY WALSH

ELISEO SAMANIEGO

STAFF:

W. R. ATTWATER, Office of Chief Counsel

BARBARA LEIDIGH, Senior Staff Counsel

ANDREW SAWYER, Office of the Chief Counsel

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ATTENDANCE (continued):

ATTENDANCE (continued):

MONDAY, FEBRUARY 27, 1989, 10:00 A.M.

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MR. MAUGHAN: I think we will go ahead and get started. We appreciate you all being here today. We do want to make this into an informal type setting. It's hard to do and still pick everything up, so we may do some adjusting as the day proceeds.

I do have a prepared statement here. For the record, my name is Don Maughan and I am Chairman of the State Water Resources Control Board.

This is the scheduled time and place for an informal discussion of the legal topics regarding water quality control planning for the Bay-Delta Estuary. A notice of this informal discussion was provided to all participants in the Bay-Delta proceeding.

I will moderate this discussion.

All the Board Members are present, our Vice Chair Darlene Ruiz, Ted Finster, Eliseo Samaniego and Danny Walsh.

The purpose of this informal discussion of legal topics is to enable a sharing of legal opinions among the participants, the Board Members and the Board's staff regarding the Board's water quality control planning for the Bay-Delta Estuary. By engaging in this discussion we hope to communicate our understanding of the requirements,

identify issues lacking consensus and the reasons for the differences.

We also are seeking the parties' opinions regarding the Board's proper course of action in revising the Draft Water Quality Control Plan. We encourage a free exchange of views during this discussion and a debate of the issues.

We will start with the discussion of the statutory requirements governing the contents of the forthcoming Water Quality Control Plan. To better focus the discussion, we will discuss separately each of several subtopics.

Barbara Leidigh, Senior Staff Counsel, will lead the discussion by introducing the subtopics and summarizing the applicable requirements under each subtopic. Following Ms. Leidigh's presentation on each subtopic, parties may ask questions and offer their own views.

In the time remaining after discussion of the water quality planning requirements we will hear opinions on each of the topics listed in our notice. If we run out of time at the end of the day and have not discussed all of the topics, we will schedule further informal discussions for the remaining topics and perhaps other topics.

The procedure for this discussion will be very informal. Any person who wishes to speak may raise their

hand and be recognized. Anyone may ask to respond to a point that someone else has made. If statements become repetitive or a stalemate arises, I may cut off discussion of a point and go on to another topic.

The Board Members and staff may ask questions at any time.

I want to stress this. Your views are important to us so a record of this discussion will be made. Alice Book, a certified shorthand reporter, is present and will record and complete a transcript of the discussion.

To accommodate the reporter, please use the microphone and state your name each time you speak. The first time you speak, please also state your address and affiliation.

Any parties who want copies of the transcript must make your own arrangements with the court reporter.

Barbara, would you like to go ahead and get started then.

MS. LEIDIGH: Okay. I would like to start off with some general information about water quality planning, statutory law, both the Porter-Cologne Act and the Clean Water Act and regulations to the Clean Water Act.

My format is going to be to talk generally about some background materials first and then I will get into some specifics, first on the Porter-Cologne Act and then

comply with water quality control plans unless they are specifically authorized to the contrary by the statute. The cite here is 13247 fo the Water Code. This provision has a long history which includes the tradition of assigning implementation functions to other agencies.

An interesting article which predates this precise section, but not the idea, is in 44 Attorney General's Opinion 126, which was a 1964 opinion.

The fourth way that the program of implementation can be carried out is that the State Board is required to consider water quality control plans when it acts upon water appropriations, and it may subject appropriations to such terms and conditions as it finds are necessary to carry out the plans. The cite for this Water Code Section, 1258.

That's all I have on the program of implementation to start off, and I think we are ready now for comments on that after the break.

MR. MAUGHAN: After the break I think we will carry on until four o'clock because we are not going to get through everything today, so you can make plans that we will conclude today at four o'clock.

So, a 15-minute break.

(Recess)

MR. MAUGHAN: Well, I think our 15 minutes are up.

I guess all the plan of implementation people decided not to come back.

Anybody want to talk about the plan of implementation?

MR. NOMELLINI: I have been talking about it already. You probably don't want to hear from me, Mr. Chairman.

MR. MAUGHAN: Now, Mr. Nomellini, we are always anxious to hear from you.

Seriously, apparently there is no one here at the present time that would like to talk on that subject. Any Board Member want to comment?

MS. RUIZ: Well, to the degree we can move any questions that might be out there, Barbara, if you can go over again what the Board must consider within the plan of implementation in summary fashion --

MS. LEIDIGH: Okay. To recap, the program of implementation has to include three things, description of the actions which are necessary to achieve the objectives -- this would include recommendations for appropriate action directed to any entity, public or private. Second, it must include a time schedule for the actions to be taken, and third, a description of surveillance to be undertaken to determine compliance with the objectives.

MS. RUIZ: And that last one again was?

MS. LEIDIGH: Description of surveillance to be undertaken to determine compliance with the objectives.

MS. RUIZ: Now, I noted in the discussion of objectives everyone seemed perfectly content to talk about other issues, but anyone have any comments on whether the Board should be making distinctions between objectives and standards? What would be sufficient evidence on the part of any federal or other sister agency to take a standard -- there appear to be a number of issues and I just wanted to indicate I am anxious to hear whether or not others are thinking along those lines and advising the Board as to how they feel we should go forward in that area.

MR. WALSH: A good point. To that end, could I ask for general guidance from counsel on the difference between standards and objectives, and whether we are required to adopt one of the two or both or how does that work?

MR. SAWYER: The term "water quality standards" is used in the federal Clean Water Act and refers to the combination of a beneficial use designation and criteria to achieve protection of that beneficial use. An objective is the equivalent of a criterion, so we often use the term "standard" to cover water quality objectives, to refer to water quality objectives, but it is a federal term and the drafters of the Porter-Cologne Act deliberately chose the

term of objective because at that time the federal term was not well defined.

Since then the federal term has been well defined.

MR. WALSH: So we are going to be dealing with standards?

MR. SAWYER: The topics that Ms. Leidigh is going to discuss include standards under the Clean Water Act if that's what you mean by we will be dealing with it.

MS. LEIDIGH: We will be talking about it.

MS. RUIZ: Bill wants to add something.

MR. ATTWATER: Andy alluded to it, but I was in the room when the various drafters of the Porter-Cologne Act were going around and around on whether to change water quality objectives to standards, and they din't want to have two definitions for standards. They didn't want to have a federal definition and a State definition, so they left it at water quality objectives.

As Andy said, a federal standard is a designation of beneficial use along with the water quality objective basically. We sort of shorthanded the phrase to be objectives equal to standards because they become standards once EPA approves them, standards in their lingo, in our lingo water quality objectives.

MS. RUIZ: And again, an objective doesn't have to be a number.

MR. ATTWATER: It could be a narrative, of course, but it could be a number, but it's not some euphemistic goal shining out there, if you can get to it in the next 50 years, that's fine. It really is something that should be met and EPA uses it that way and I have always used it that way. It's just a question of how you get there and in what time frame. I don't have any problem --

MR. SAMANIEGO: Is it either or neither?

MR. ATTWATER: What?

MR. SAMANIEGO: Setting a goal.

MR. ATTWATER: I don't like the term goals. It is not in the law.

MR. SAMANIEGO: It is not in the law?

MR. ATTWATER: Racinelli particularly noted it may take you a long time or you may never get there. You may get a water quality objective at 100 parts per million and you try your best to get there through various techniques, either through waste discharge requirements or prohibitions or water requirements, permits, amendments or you may get there through a negotiated settlement or physical facility, and ten years down the line you may not get there.

Now, if you can't get there at all after trying everything in the world, maybe that objective is not a reasonable objective. You may have to raise the objective.

MR. SAMANIEGO: What apparently is the important

element is to have a plan that directs you in that direction.

MR. ATTWATER: Say that again.

MR. SAMANIEGO: An objective in order to be valid must have a design by which you would attempt to reach that point. We won't say goal.

MR. ATTWATER: Well, that's the reason for the plan of implementation, and if you are harkening back to your Regional 5 experience, it is fairly straightforward when you are dealing with just dischargers because you have basically two ways to do it.

You give them waste discharge requirements for secondary treatment and then they run to the State Board and get a grant for 87.5 percent and go out and build their facility. In that context it's pretty straightforward. It's more difficult when you are dealing with a non-point source discharge rather than a point source, of course.

That's a little more difficult and then as you deal with salinity, it becomes even more difficult because nobody is discharging anything. It's sort of the reverse, you have an intrusion problem because of lack of outflow and so the further you move away from the classic regulated point source discharge, the more mind boggling and the more intellectually difficult it becomes.

MS. RUIZ: Let's take for example the THM

precursors, bromides specifically, how do you see setting the objective? Let's say EPA sets a very stringent number to protect public health as it were, what do you envision are the implications of such a standard placed within the basin plan?

MR. ATTWATER: Well, first of all, you assume you would use an EPA number. There's a whole cafeteria of numbers out there.

MS. RUIZ: For the purposes of this hypothetical, suppose the only number is a very stringent number. It's related to public health and as we have handled it in the past the Regional Board takes drinking water standards, for example, and just uses them.

MR. ATTWATER: They use the Health Department numbers?

MS. RUIZ: Yes.

MR. ATTWATER: Well, in your plan of implementation you could put the number in, say the number gets in the basin plan, in the implementation plan you would have to determine whether or not you can realistically get to that number. You may not realistically be able to get to that number in terms of what you can regulate. You may receive testimony that the THM, or the bromide precursors, or whatever you want to call them, have to be taken care of on the water supply end.

What if there is a more economic way of doing it rather than regulating outflow? What if it is determined that the domestic supplier at the supply point could instead of using chlorine, could use something else, ozonation, something like that, more economical?

MR. WALSH: On an unrelated issue --

MS. RUIZ: Do we have the option consistent with the federal act as we have done in 68-16 and elsewhere to simply define our own terms for our better thinking for handling these issues and in fact make a distinction between standards and objectives?

MR. ATTWATER: I don't think we have the option of defining our own terms. I think they are defined in the Clean Water Act and Porter-Cologne Act.

What you have the option of doing is not necessarily taking EPA's numbers and the Health Department's numbers. You could come up with numbers of your own if they were supported by good evidence.

MS. RUIZ: Now how do you read EPA's approval and disapproval process with number setting where they would view it as more stringent than, but not less than?

MR. ATTWATER: You mean our number more stringent?

MS. RUIZ: Or that we would have the right to exercise a number more stringent, but we wouldn't have the opportunity to reduce that standard or broaden it unless we

had some extraordinary evidence.

MR. ATTWATER: Okay, let's take it in two parts.

Certainly we have the authority to be more stringent. I don't think there's any questions about that. Whether we can be less stringent than the EPA number in the Gold Book or some other promulgated standard, I think that you probably could. I think you could use a Health Department number, say it was less stringent than EPA's number, if you had good reason for doing that and the good reason would be it was a reasonable number under the Porter-Cologne Act.

MS. RUIZ: And we may use, included in that analysis the rainfall year, year type?

MR. ATTWATER: Yes. That's interesting. That has not been discussed yet and nobody has mentioned it, but one of the options the Board has is that you could have, I hate to use the word "floating standard," but you could have different standards for different year types, I believe. I think that is one of the ways of getting out of the impasse. Whether you call it dry year relaxation or you set up a chart and say if you are in a dry year, this is the number, if you are in a critical dry year, this is the number, or if you are in some other kind of year, this is the number -- I believe the Board has the authority to do that and that may alleviate some concerns.

MR. WALSH: The same way they are handling the Bay standards now.

MR. ATTWATER: Yes. That wasn't really a subject of --

MR. SAMANIEGO: When you say that we have the ability of perhaps the option to establish our own numbers based on good evidence, the test for good evidence is what, acceptance at a Regional Board, concurred n by the State Board?

MR. ATTWATER: It could be, sure.

MR. SAMANIEGO: It need not go beyond just the weight of the evidence? We need not go into clear and convincing or beyond the reasonable doubt standards or any of that?

MR. ATTWATER: I wouldn't think so. First of all, this is a quasi-legislative process.

MR. SAMANIEGO: So simply the weight of evidence as the Regional Boards do water quality?

MR. ATTWATER: If they adopted a number and you approved it, I think that would be a number that you could use.

MR. SAMANIEGO: But as we hear more often of late, clear and convincing, that is a higher level of good evidence?

MR. ATTWATER: Well, I don't want to get either

myself or the Board confused about the hierarchies of evidence. I mean that's esoteric for even most lawyers. A lot of that has to do with the burden of proof that comes in criminal cases as opposed to civil cases and adjudictory cases as opposed to quasi-legislative processes.

MR. SAMANIEGO: What we have been doing in the past is good enough in good evidence?

MR. ATTWATER: I think with the exception of -- Racinelli actually said, for example, the instream quality standards were acceptable. I mean that was approved in the Racinelli decision. What was not approved was the process by which we commingled water rights and water quality.

So the court actually upheld the numericals if you will. It was the process that they took us up on.

MS. RUIZ: And understanding that process and following that thought, is it advisable or should we be looking at having findings of fact within basin planning, something which we are not compelled to do?

MR. ATTWATER: Yes, I think it is important, Darlene, because you are going to use all that information eventually in a water rights process. I think it will help people if you articulate the reasons for the numbers.

MR. MAUGHAN: Mr. Krautkramer.

MR. SAMANIEGO: When you say you articulate, you mean the findings of a public hearing?

MR. ATTWATER: I think it is helpful -- I think you could probably come out with a number, staff could develop a number, for example, that says this is the number that, you know, based upon a survey of the literature we think is an appropriate number. In fact, that was done in the Ocean Plan originally. That's how the Ocean Plan numbers were selected. It wasn't to do with any test we did in the ocean. It had to do with a literature survey. Staff could do that.

But I think in order to help any court that reviews that and certainly to help the public that has to comply with it, it would be beneficial to put that kind of information in the plan. That's the basis for your number. Otherwise, you raise the specter of the Board being arbitrary.

MR. SAMANIEGO: Didn't that same test fail in the selenium issues, that the selenum numbers in Salt Slough and the San Joaquin River were not site specific?

MR. ATTWATER: I'm not sure, to be honest with you.

MS. RUIZ: Well, again, I guess I was going back to the Racinelli review where they stated about the three questions that will be asked by any reviewing court, and all they were looking at was to be fully fair procedures, that we act within the scope of our delegated authority and was our action reasonable. It doesn't require us, of

course, to establish our findings of fact right up front, that great deference will be paid to us as long as we meet that.

MR. ATTWATER: I agree with you in the abstract, but I think in this particular the Board would be well served for explaining what they are doing in the water quality plan and use somewhat the same process so a reviewing agency, whether it be EPA or a reviewing court, can follow the trail from beginning to end on what the bases for the numbers are and how we got there, the train of thought, the typical train of thought that the courts laid out in a quasi-adjudicatory process.

MS. RUIZ: But again without waiver of our right not to have to do that?

MR. ATTWATER: Oh, sure. And as I said initially, the Board didn't have to hold 50 days of hearing to come up with the Draft Plan. They could have the staff do it and then hold the hearings.

MR. MAUGHAN: All right.

MR. KRAUTKRAMER: I have a point of clarification on the distinction between objectives and criteria since that's one of the questions I missed on my quiz earlier.

I think one of the staff attorneys up here said that an objective was the same as a criterion under federal law, but my understanding of criteria in federal law, the

definition of criteria explicitly excludes consideration of economic or technical factors, whereas the definition of objective under the Porter-Cologne Act specifically includes economic factors.

I was wondering how the Board interpreted those two.

MR. ATTWATER: Andy is looking it up. EPA has been accepting them for the last 20 years, so I assume they know what they are doing.

MR. WALSH: Was that comment based on a legal article you wrote?

MR. ATTWATER: No.

MR. SAWYER: The definition of criteria in EPA's regulations is not separately defined in the act itself, does not expressly include economic consideration. That does not mean that the Board cannot consider economic considerations in setting criteria, in setting objectives. In either case there are levels of water quality constituents or characteristics set to protect the beneficial use. Each term is defined. The definitions are not identical, but they are compatible and it's been the intent in the original drafting of the Porter-Cologne Act and its use since 1969 that the objectives do serve as water quality criteria for purposes of the Clean Water Act.

MR. ATTWATER: This was explainded in detail in our initial legal presentation to EPA in early 1973 when they

approved the State's ability to run the NPDES permit program and do the planning, et cetera, that has been accepted by EPA and so that is really the strongest argument that the two laws are compatible and they have been viewed so by EPA for the last, at least since 1973 to the present time, and the question has never been raised by EPA.

MS. RUIZ: Does that respond to your question.

MR. KRAUTKRAMER: It responds in part, but I guess the concern goes back to the balancing or reasonableness discussion conducted earlier and that's if a decision is made by the Board to adopt the lower level of protection reflected in objectives based on economic factors, when in fact that is something that under the Clean Water Act is not supposed to be considered, at least at the criteria stage.

I'm not saying it is not necessary to be considered at some time. How would the Board deal with that situation.

MS. RUIZ: I don't see any inconsistency. If you take the criteria that EPA has developed and you take that and put it in the context of a public hearing here in California, it is but a factor to be considered and weighed against our test and we may use our test ultimately in evaluating the use of that criteria to ultimately reach an

objective, as I understand it.

MR. ATTWATER: Yes. We don't have to buy into the federal numbers whole hog.

MR. KRAUTKRAMER: But you are ultimately subject to -- those numbers are ultimately subject to approval by EPA assuming now we are talking only about salinity or temperature.

MR. ATTWATER: I would put this to you, Mr. Krautkramer, when the State Board adopts a water quality control plan, I have always viewed it at that point as being binding upon dischargers, if you will, and other people in the State of California at the time the State Board acts. Whether EPA concurs or doesn't concur tends to be of no moment to me. What they would have to do is take some affirmative action to invalidate those standards or objectives. They have never done so.

Occasionally we get a missile from EPA in San Francisco saying, do this or do that. If we don't do it, their only remedy really is to take the entire program away from the State Board, and I would submit to you that they are not going to do that as a practical matter.

MR. KRAUTKRAMER: I guess as a closing comment, to my mind the fact that the criteria excludes economic considerations, and as I understand the process, sets up another process for assessing economic factors and the use

of attainability analysis I believe they call it, that that reflects a judgment in the Clean Water Act that the principal purpose of a water quality standard is to protect the beneficial use in the body of water for which the standard is being set and certainly at the very least establishes in a sense somewhat of a priority, if you will, for those uses over other uses, and only if there can be demonstrated, pursuant to the use of attainability analysis that for some reason lower criteria should be established, can such a lower criteria be established and with that kind of priority where you start out with a mandate to fully protect beneficial use, and only through a certain specific kind of showing can you back off, that that somehow translated to the Porter-Cologne Act, I think the same considerations would apply to objectives.

MR. SAWYER: I think in some respect this discussion is better covered when Ms. Leidigh gets into the specific Clean Water Act requirements.

As I see it, the question is not our objectives criteria, the question will become is a particular objective being proposed as part of a particular basin plan consistent with the federal requirements for criteria. As a whole they are compatible. One can make an argument that a particular proposed objective does or does not meet federal requirements. The use of the attainability

analysis which Mr. Krautkramer talked about concerns what beneficial uses will be designated for protection which is the first topic we would like to discuss under the Clean Water Act.

MR. KRAUTKRAMER: I would agree with that statement. I am not raising an issue. I think that has a generic answer to it, but I think it does raise the question of, if the Board were to backslide, if you will, or offer a lower level of protection in an objective that it adopts, I think that the Clean Water Act considerations, in the scheme of the Clean Water Act, sets out a process which the Board has to be aware of in adopting an objective.

MR. MAUGHAN: All right, thank you.

Anything else on this? I think Mr. Littleworth sort of passed a question about endangered species.

Mr. Roberts, do you have any comments you would like to make on that before I forget it?

MR. ROBERTS: Is that further down the list?

MR. ATTWATER: That is on the list of issues.

MR. ROBERTS: I will pass also.

MR. MAUGHAN: All right. The next item.

MS. LEIDIGH: The subtopic on my list is to start talking about the Clean Water Act. I will give you some background and then I will go into a discussion of beneficial use designations.

The Clean Water Act was adopted in 1972 and adopted to replace earlier statutory provisions enacted in 1948 as the federal Water Pollution Act. The State Board implements provisions of the act and the section that authorizes the State Board to do that is Section 13370 and following.

The Clean Water Act expressly declined to supersede, abrogate, or impair the authority of the State to allocate quantities of water within its jurisdiction, and that's under Section 101g, and we talked about that quite a bit already today.

EPA regulations implementing the Clean Water Act provisions for water quality planning are set forth in 40 CFR Parts 130 and 131. Among other provisions the act includes water quality planning requirements and permitting provisions for discharges of pollutants from point sources.

The Clean Water Act requires that each state have a contiunuing planning process for all of its navigable waters approved under Section 303(e) and the planning process must include adequate implementation including schedules for compliance, for revised and new water quality standards.

Section 303 of the act, which is at 33 U.S. Code Section 1313 requires the State to adopt water quality standards which must be reviewed and approved by EPA.

For example, the 1978 plan was approved by EPA under Section 303(c):

> Standards consist of the designated uses of navigable waters involved and the water quality criteria for such waters based upon such uses.

And this is in Section 303(c)(2).

> Criteria in turn are the equivalent of water quality objectives under the Porter-Cologne Act.

Now as Mr. Krautkramer undoubtedly would point out, they are not precisely the same but they are the equivalent. Thus the water quality objectives and beneficial use designations adopted under the Porter-Cologne Act serve as water quality standards for purposes of Section 303 of the act.

Standards under the Clean Water Act must protect the public health and welfare, enhance water quality and serve the purposes of the act. They must be based on a consideration of their use and value for public water supplies, propagation of fish and wildlife, recreation purposes, agricultural, industrial and other purposes, and navigation.

And the citation for this point is Section 303(c).

The first subject of discussion is beneficial use designations. The designation of beneficial uses under the

Clean Water Act is detailed at length in 40 CFR 131.10. The following points in that section are relevant:

First, waste transport or waste assimilation may not be designated as a beneficial use. Now, this does not mean, however, that water cannot receive wastes for assimilation if designated beneficial uses are not unreasonably impaired.

Second, the water quality standards for downstream waters must be considered.

Third, states may designate subcategories of a use.

Fourth, states may adopt seasonal uses.

Fifth, states may adopt a designated use or substitute subcategories of a use only under the following circumstances: The use is not an existing use.

Now existing use is defined as a use actually attained in the water body on or after November 28, 1975, whether or not it is included in the water quality standards. The cite for this is the regulations, Section 131.3(e).

In addition to the use being an existing use (b), the State can demonstrate that attaining the designated use is not feasible for the following reasons:

First, naturally occurring pollutant concentrations prevent the attainment of the use or natural ephemeral, intermittent or low flow conditions or water levels prevent

the attainment of the use. However, I note that if such effluent discharges exist to allow meeting the use, the use cannot be removed.

Another point, human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place, or dams, diversions or other types of hydrologic modifications preclude the attainment of the use and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or physical conditions related to the natural features of the water body such as lack of a proper substrate, cover, flow, depth, pools, riffles and the like unrelated to water quality preclude attainment of aquatic life protection uses; or controls more stringent than the controls for effluent limitations in the Clean Water Act Sections 301(b) and 306 would result in substantial and widespread economic and social impacts.

The sixth point under my start off list is that states may not remove a designated use if, (a) there are existing uses unless a use requiring more stringent criteria is added, or (b) such uses will be attained by implementing effluent limits under Clean Water Act Section 301(b) and 306, and by implementing best management practices or

non-point source control.

Seven. If existing use are higher than those specified in the water quality standards, a state must revise its standards to reflect the uses actually being attained. If the designated uses do not include the uses specified in Section 101(a)(2) of the Clean Water Act or the state wants to remove a use specified in Section 101(a)(2), the state must conduct a use attainability analysis. This analysis is defined as a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological and economic factors.

And the uses listed in Section 101(a)(2) for your information are protection and propagation of fish, shellfish and wildlife and recreation.

That will conclude the discussion of the designation of beneficial uses under the Clean Water Act. And now I would assume there probably are some questions or comments.

MR. MAUGHAN: I think you overwhelmed everybody.

Mr. Nomellini.

MR. NOMELLINI: Is there in effect through the statutes in the particular Clean Water Act a non-degradation requirement?

MS. LEIDIGH: There is. I was planning to talk about that a little bit later, but there is something

Admin Record File

MEMORANDUM

SUBJECT: Meeting with Environmental Interests on Economic Studies on January 20, 1994

FROM: Tom Hagler, ORC-9

TO: File

DATE: January 20, 1994

Background

On January 20, 1994, we had a meeting with various environmental interests to discuss the draft RIA prepared for the Bay/Delta WQS proposal. Patrick Wright (W-3), Palma Risler (W-3) and Tom Hagler (ORC) attended from EPA. An attendance sheet is attached. An agenda is attached.

The following is a list of the different issues raised by the participants during the meeting. I am not summarizing EPA comments at the meeting, in that those comments do not constitute "new information" for the Agency. No one submitted written materials at this meeting.

Comments

1. There was a question as to whether the "1 maf urban reduction" in critical years is accurate. Historically, this isn't true in every year. It may depend on whether the critical year is in an isolated or an extended drought.

2. Comment that DWRSIM overstates carriage water and understates deliveries. See Contra Costa Water District testimony on the biases in the model.

3. Note that the study did not assume a switch to groundwater pumping, so that, if anything, the study would overstate the impacts of shortages. See further discussion of groundwater below.

4. More work should be done on the crop subsidies, including the potential changes in capitalized land values caused by the subsidies.

5. We may want to look more at the marginal impacts on certain communities (fisheries, agricultural) rather than just the aggregate.

6. We should look at Fisher's study for EBMUD.

7. We should look at both short-term and long-term responses to drought, varying by short to extended drought periods. Again, this may be an issue of the frequency and severity of shortages.

8. We need to explain how we derived the 1 maf number for urban impacts. Is it demand? Deliveries?

9. Questions about the reported physical limitations on water transfers "north to south", as well as questions about the existing and potential transfer regime for south of Delta transfers.

10. We should look at MET's Mono Lake testimony that the Colorado Aqueduct will be full, and consider how this cuts two ways: (a) that the MET baseline is higher than thought, or (b) that it may restrict transfers.

11. The Colorado River ESA restrictions may actually <u>increase</u> the flows available to MET.

12. Request for more information about how we did the fish population studies:
- How did we do the modeling?
- Could we use actual historical data to determine effects of "wetter" years in the Delta?
- We should try to standardize assumptions across the different studies, so that we don't have very conservative assumptions for some and liberal for others.

13. Is there a way to factor in the temporary nature of world salmon market conditions? Similarly, can't we factor in the economic effects of increased fish supply availability on the overall profitability of the California fishery?

14. We need to do more work on water transfers, both as to what has actually happened and what the more feasible future scenarios would be.

15. There may be some information coming in on the use of a fund.

16. There is a problem with using Hanneman study, in that it still seems to be comparing incomparables ("apples and oranges"). This becomes a broader problem when it appears that we are comparing qualitative benefits with quantified costs. What can we do about this?

17. Note that the Hanneman study only measured the highest 30% of households, so it may not be totally accurate on overall costs if those costs were spread over a broader population.

18. How do we explain and account for the fact that a substantial part of the drought water bank did not sell at the $175 fixed price?

19. The analyses should consider whether moving production elsewhere may be beneficial overall (either within California or within the U.S.). This was also referred to as the geographic substitution of production.

20. There is some concern about the usefulness of the KARM (?) and/or CVPM models to deal with this substitution issue. The CVPM model apparently covers only the Central Valley in its production modeling. KARM is somewhat broader.

21. Leaving out the effects of groundwater pumping is a major issue, because increased pumping ameliorates the effect of shortages, at least in the short run. The analysis should get a handle on the longer term effects.

22. Note that to the extent that a user has access to storage capacity, shortages need not carry over into any economic impacts unless and until the storage is impacted. This again is an issue of modeling the effects of short versus extended droughts. It may mean that our assumption about "x" impacts in <u>every</u> critical year is grossly inaccurate.

AGENDA
WORKING MEETING #1
REGULATORY IMPACT ASSESSMENT - FEEDBACK
ENVIRONMENTAL AND FISHERIES INTERESTS

Thursday, January 20, 1994
12:00 - 2:00

75 Hawthorne Street
San Francisco
18th Floor - RA's Strategy Room

Meeting Objective: To begin to identify issues and questions on the RIA analysis. To decide on follow-up process for further dialogue on issues.

12:00	**INTRODUCTIONS** **PURPOSE OF RIA ANALYSIS** **CLEAN WATER ACT AND ECONOMICS**	**PATRICK WRIGHT**
12:20	**ISSUES AND INFORMATION NEEDS**	**PALMA RISLER**
12:40	**FEEDBACK FROM PARTICIPANTS** - identification of questions - identification of issues	**PARTICIPANTS**
1:45	**OPTIONS FOR FURTHER DIALOGUE** - discussion and decision by participants	**PALMA RISLER**

For further information, please call Palma Risler at 415/744-2017

Issues and information needs: Draft RIA analysis

Water supply impacts:

- pre-existing/cumulative/relative share/base
- developing scenario that uses current contract shortages
- extended droughts
- DWR modeling and position on impacts

Split between ag and urban:

- 80/20, different scenarios of COA and prorata?
- different shortage policies

Agriculture analysis:

- pre-existing water reductions
- groundwater
- financing
- govt supported crops
- community impacts v. economic efficiency

Urban analysis:

- consumer surplus methodology: long-run v. short run demand elasticity; assuming demand management in all CY rather than extended drought;
- translating current analysis to price increases at retail level and conservation targets
- accounting for increased urban demand
- green industry impacts
- water transfers/water bank - not possible with ESA and standards
- regional differences in costs bwt SC and Bay area
- Substituting delta water: higher gw cleanup costs; higher water reclamation costs; difficulty in meeting basin plans
- price rationing: questions on equity

Benefits:

- monetizing non-use benefits
- overall benefits of market for water
- all recreational fisheries
- conservative compared to urban or ag

Analysis of transfer of income/cost effectiveness analysis

Recreation losses south of delta

Consistency between benefits and costs analysis - use of indirect costs

Extent of water market

Analysis of other impacts:
- THM's
- power impacts

Analysis of suggested policy innovations:
- funds, fees, trading of water rights permits

Attendance list
January 20, 1994
Bay/Delta RIA - feedback

Name/Affliation	full mailing address	phone and fax number
GARY BEDKER/USBR	2800 COTTAGE WAY SACRAMENTO, CA 95825	916-978-5251 916-978-5284 Fax
Craig Stroh, Reclamation	2800 Cottage Way Sacramento, CA 95825	916 978 5251 916 978 5284 Fax
John Krautkraemer	5655 College Ave Oakland CA 94618	510/658-8008
Gary Bobker The Bay Institute	10 Liberty Ship Way #120 Sausalito, 94965	415/331-2303 332-8799 fax
PETER VON HAAM	32b ATHOL AVE OAKLAND CA 94606	(510) 835-4840 ph/fax
Patrick Wiebe	EPA	
Tom Hagler	EPA	415-744-1993 415-744-1375
STEPHAN VOLKER	180 MONTGOMERY STREET #1400 SAN FRANCISCO, CA 94104	415/627-6700
Perry de Valpine	"	"
David Fullerton NHI	1148 Sansom St./Suite 1200 San Francisco, 94104	415-288-0550 0555 f
Zeke Grader	PCFFA P.O. Box 989, Sausalito, CA 94966	(415) 332-5080

Admin Record File

MEMORANDUM

SUBJECT: Meeting with Urban Interests on Economic Studies on January 19, 1994

FROM: Tom Hagler, ORC-9 TH

TO: File

DATE: January 20, 1994

Background

On January 19, 1994, we had a meeting with various urban interests to discuss the draft RIA prepared for the Bay/Delta WQS proposal. Patrick Wright (W-3), Palma Risler (W-3), and Tom Hagler (ORC) attended from EPA. An attendance sheet is attached giving the other participants. An agenda is attached. The meeting generally followed the agenda.

The following is a list of the different issues raised during the meeting. No attempt has been made to identify the person making the comments, nor to organize the comments into subject matter. No one submitted any written materials at the meeting.

Comments

1. There were several questions about the role of the RIA in the EPA rulemaking process, and about the next steps in the rulemaking.

2. There was concern about the quality of the assessment of water supply impacts. The focus was on the assessment of the cumulative impacts of the different ESA and CWA requirements, whether already imposed or proposed.

3. The Club Fed graphic using a raindrop to show impacts: Where did the relative share numbers come from?

4. It was suggested that the DWR modeling runs need a better public explanation and maybe some more technical workshops. Many attendees expressed reservations about the accuracy of the DWR model.

5. The assumptions that went into the DWR modeling should be explained in the RIA.

6. Some questions arose as to whether using D-1485 plus winter run requirements is a fair "base". Some recommended doing an incremental or stepping stone approach, adding the cumulative effects of the next regulation.

7. There was substantial concern over the use of the 80-20 "ag-urban" split. Perhaps we should have BOR and DWR give their respective impressions of the split, or use the present diversions as a proxy, or use a number of different splits to give the range. There may be some testimony on this in the D-1630 materials.

8. Just using the split alone is very rough. The frequency and severity of shortages may be important for the financial modeling. This is essentially a concern about extended shortages.

9. There was substantial discussion about whether the RIA goal was to determine "economic impacts" versus describing the most "economically efficient" scenario. These aren't the same.

10. We should incorporate the economic effects of long-term increases in groundwater pumping into the economic analysis.

11. Why is Riverside County not included in map 4-2? (Answer appears to be that it was a typo on the map and that it was included in the analysis itself.)

12. We are doing a "year in isolation" analyses, which probably understates the effects of a long term drought.

13. Some discussion as to whether the "Carson-Mitchell" (sp?) would be a better measure of consumer surplus. A model by Hoagland was also suggested.

14. Use of retail residential customer as proxy for shortage affects understates the impact of "green industry" as well as impact on businesses.

15. RIA should take into account the <u>regional</u> differences in the ability to implement the different conservation and reclamation alternatives.

16. RIA used L.A. as model for urban impacts. Other cities such as San Francisco face different alternatives and alternative costs.

17. RIA should consider extent to which user status as a contractor or noncontractor affects economic costs of the user.

18. Recreation benefits and costs (especially for S. Cal.) are not clearly included.

19. There appears to be an imbalance in the analysis where indirect benefits are described but not indirect costs.

20. There was some testimony in the D-1630 hearings that reducing Delta water exports to S. Cal. could have the following impacts:
(a) Make it harder to meet the WQS in the Basin plans, because of reduced higher quality Delta water.
(b) Higher groundwater cleanup costs for same reason.
(c) Higher ground subsidence costs
(d) Higher water reclamation costs

21. Reclamation plants have their own economic and environmental costs that should be factored into the analysis.

22. Several questions came up as to the adequacy of the analysis to support a critical habitat designation. We generally deferred this discussion because EPA doesn't know the ESA rulemaking process.

23. Questions as to whether we should be using the marginal cost of water or the average cost of water in the analysis. Or both.

24. There was a lengthy discussion as to whether the proposed standards, in conjunction with other restrictions, allowed water transfers north to south. If not, the assumptions about alternatives in the RIA may be incorrect.

- Some of this was due to perceived limitations on ability to pump - the absence of pumping "windows"

- Some is due to perceived limitations on new Colorado River because of the recent ESA actions on the Colorado.

25. Next steps. It was suggested that at least two additional meetings be held - one before and one after the close of comment period.

Attendance list
January 19, 1994
Bay/Delta RIA - feedback

Name/Affliation	full mailing address	phone and fax number
Craig Stroh, Reclamation	2800 Cottage Way Sacramento, CA 95825	916 978 5251 978-5284 Fax
Greg Wilkinson. Best, Best & Krieger	P.O. Box 1028 Averside, Cal. 92502	909/686-1450 909/686-3083
Larry Dale	2030 Addison St 500 Berkeley CA	510 6449492 5407496
John Ryan SCVWD	5750 Almaden Expwy San Jose CA 95118	408 265-2600 FAX 408 266 0271
Richard A. Denton	Contra Costa Water District P.O. Box H20 Concord CA 94524	(510) 674-8187 Fax (510) 674-8122
Ray Hoagland	CA Dept. Water Resources 1416 9th St Sacramento, CA 94236-0001	(916) 653-6785 FAX 653-6077 ray@water.ca.gov
Adrian Griffin	State Water Board ~~901 K Str~~ PO Box 100 Sacto 95812	916/657 1832
Wendy Illingworth	Foster Associates 120 Montgomery Suite 1776 S.F CA. 94104	415 391 3550.

Attendance list
January 19, 1994
Bay/Delta RIA - feedback

Name/Affliation	full mailing address	phone and fax number
STEVE HALL ACWA	910 K ST STE 250 SACRAMENTO CA 95814	916-441-4545 916-441-7893
Lyle Hoag CA. Urban Water Agencies	455 Capitol Mall Sacto 95814	(916) 552-2929 FAX 552-2931
Roger James Santa Clara Valley Water District	5750 Almaden Expressway San Jose, CA 95118	408/265-2607 x 2327 408/266-0271
THOMAS M. BERLINER SF Pub. Util. Comm'n	City Attorney's Ofc. City Hall, Rm 206 SF, CA 94102	(415) 554-4295 FAX 554-4284
CHRISTINE MORIOKA SF WATER DEPARTMENT	425 MASON ST. SAN FRANCISCO, CA 94102	(415) 923-2467 (415) 771-4421
James Roberts ~~Box 54154~~ ~~Los Ang~~ Met. Water Dist.	Box 54154 Los Angeles 90054	(213) 217-6316 (213) 217-6890
Phillip McLeod MHB Consultants, Inc	2101 Webster St Suite 1660 Oakland, CA 94612	(510) 834-1176
John Skinner EBMUD	PO Box 24055 Oakland CA 94623	(510) 287-1125 Fax (510) 287-1275

TOM

AGENDA
WORKING MEETING #1
REGULATORY IMPACT ASSESSMENT - FEEDBACK
URBAN WATER INTERESTS

JANUARY 19, 1994
1:00 - 3:00

75 HAWTHORNE STREET
SAN FRANCISCO
18TH FLOOR - RA'S STRATEGY ROOM

Meeting Objective: To begin to identify issues and questions on the RIA analysis. To decide on a process for further dialogue on identified issues.

1:00	**INTRODUCTIONS** **PURPOSE OF RIA ANALYSIS** **CLEAN WATER ACT AND ECONOMICS**	**PATRICK WRIGHT**
1:20	**OVERVIEW OF RIA ANALYSIS**	**PALMA RISLER**
1:45	**FEEDBACK FROM ATTENDEES** - Identification of questions - Identification of issues	**ATTENDEES**
2:45	**OPTIONS FOR FURTHER DIALOGUE** - Discussion and decision by attendees	**PALMA RISLER**

For further information, please call Palma Risler at (415) 744-2017.

Assumptions and issues: Draft RIA analysis

Water supply impacts:

pre-existing, attributing impacts to CWA

Split between ag and urban:

80/20, different scenarios
different shortage policies

Agriculture analysis:

- pre-existing water reductions
- groundwater
- financing
- govt supported crops

Urban analysis:

- consumer surplus methodology: long-run v. short run demand elasticity; assuming demand management in all CY rather than extended drought;
- translating current analysis to price increases at retail level and conservation targets
- accounting for increased urban demand

Benefits:

- monetizing non-use benefits
- overall benefits of market for water
- all recreational fisheries

Analysis of transfer of income/cost effectiveness analysis

Analysis of other impacts:

- THM's
- power impacts

Analysis of suggested policy innovations

- funds, fees, trading of water rights permits

DRAFTS — Tom any comments?

MEMORANDUM

SUBJECT: Meeting with Agricultural Interests on Economic Studies on January 26, 1994

FROM: Palma Risler, W-3-3

TO: File

DATE: January 27, 1994

Background

On Wednesday, January 26, 1994, we held a meeting with agricultural interests to discuss the draft RIA prepared for the Bay/Delta WQS. The meeting was arranged and hosted by Dan Nelson of the San Luis & Delta Mendota Water Authority in Los Banos. An attendance sheet is attached giving the participants. An agenda is attached. The meeting was fairly informal with participants providing feedback on the analysis and information on economic concerns.

The following is a list of the different issues raised during the meeting. No attempt has been made to identify the person making the comments, nor to organize the comments into subject matter. One paper was submitted at the meeting.

Comments

1. Discussion on the 12/15 water supply impacts: why were cumulative impacts not presented? how might cumulative impacts (including CVPIA and refugee water supply) be included? Commentors indicated that no one knows how the 800K will be allocated and there isn't even a consistent answer or range from the same people.

2. Several comments were made about emphasizing a water market. There was concern about EPA pushing the State toward a system that it has shown it's not interested in - legally and politically. Comments were made that using a water market analysis is inappropriate given there isn't a track record for transfers. Several comments were made on how difficult transfers are in

practice because of bureaucratic hassles. Suggestions were made to include a case study in a transfer to give a better idea of how difficult transfers actually are.

3. Physical contraints on transfers: have they been taken into account, especially for ag to urban transfers.

4. As an example of how unrealistic a water market is, a paper was submitted on a water transfer proposal thats been rejected. This transfer proposal even provides instream flows.

5. Assumptions on the amount of ag to urban transfers and a possible drought water bank were questioned. Discussion centered on EPA use of DWR Bulletin 160 information. Does the DWR information include fish counts and take limits? Comments were made that the CWA standards will make transfers cross delta more difficult, not easier.

6. Current water allocation is already down to 50-60% of contract water. No one seems to be recognizing that this will relate to significant economic impacts. These reductions are not just tied to acre-feet, one has to understand that the physical capacity of the pumps combined with the priority system and new water for refugees will reduce the contracts amounts to 50% even without CWA standards.

7. Reliance on DWR bulletin 160 was questioned.

8. Discussion on the process for promulgating final standards: what is the timeframe, what is State Board timeframe?

9. Discussion on the purpose of the RIA: both to satify OMB requirements and disclosure for decisionmakers. Partipants were discouraged by the product, expectations were raised in discussions in Washington whenever economic concerns were discussed. Expectations were especially raised on analyzing community impacts, the analysis is actually very generic masking impacts in areas that are currently hardest hit by water reductions.

10. What can really be accomplished in the comment period, how is this possible to get enough information to respond considering how much other policy discussions are ongoing and CVPIA changes.

11. Shortage and priority provisions related to refugee water supply was discussed.

12. Any economic modeling is limited, case studies are a better way to get at whats actually going on versus this theoretical analysis.

13. Farmers respond to more than economic signals, significant dislocations also have impacts on the beliefs and feelings in a community which can become economic factors. The report never touched on other aspects of community well-being.

14. Discussion on why RIA included implementation scenarios that included policy change: if EPA's role isn't implementation, there shouldn't be recommendations, the process of policy is dynamic.

15. The RIA is flawed because it is comparative statics, the issue of time is not well accounted for, adjustment dislocation isn't accounted for.

16. Many analysis were done for the drought, they show higher impacts in one county than this report. Surveys done on the drought showed how farmers responded, but this was because they thought it was a short term response they could temporarily overdraft basins or pay for transfers for one year.

17. The RIA doesn't account for the short-term v. long-term.

18. The increased frequency of shortages isn't discussed.

19. CFA did a useful report during the Miller/Bradley debate.

20. Hatcheries are never discussed as a policy option. The economics of closure seem unlikely given the current push for hatcheries.

21. The water situation in California looks bleak enough without any new demands by environmental requirements.

22. Both the severity and the frequency of shortages are important, the damages increase geometrically.

23. Urban areas shortage criteria was discussed. Why do areas call for restrictions when reservoirs are kept so full? Is this margin of risk really appropriate? Does this create artificial shortages?

24. The RIA didn't take the shortage provisions into account, ag takes reductions before urban. DWR models may be able to analyse who takes reductions with SWP and CVP systems.

25. Is there any acknowledgement of the commuter situation where low housing prices in the SJV provide benefits?

26. COA split: There is disagreement as to current policy. However, once these policies are modeled, looking at current shortage provisions between urban and ag is important.

27. Land value declines are very real, land auctions last year showed how available water effects land value declines.

28. Community impacts need to be looked at, especially in terms of how lowered land values lead to lowered assessments, then lowered property taxes and then lowered county revenues.

29. Analysis on food prices was incorrect. SJV produces majority of some crops and lowered production will effect food prices. Forage crops will effect dairy prices, government gets surplus, low cost foods from SJV and these welfare/WIC programs can be effected.

30. Models mask how reliability has been the strong point of California ag. Contracts with food distributors and processors are heavily dependant upon reliability. Even for crops that California is not dominant in, California is important for the windows of opportunity.

31. What are the models assuming about price elasticity?

32. Page 4-10-11 has some strange statements about property values. There's been many studies that have assumed this "waiting in the wings" to invest in SJV ag, but this is no longer true - you can no longer assume there will a buyer.

33. Bank criteria on production loans is important, banks look for equity/water and farming experience. Water availability is affecting all of these.

34. Crop shifting assumptions aren't possible with this level of water availability. No one would ever shift to permanent crops given increased probability of shortages, the investment is too great and needs an assured water supply.

35. Higher value crops do not use less water, in addition the salt tolerance is less so they can't be grown.

36. The drought response and flexibility isn't sustainable.

37. The price of water has gone up significantly, what was assumed about the price of water.

38. Price is important in the certainty of the value of the asset.

39. Cumulative impacts are important, the averages mask impacts, there is no sense of the current dislocation.

40. South of delta currently the situation is a critical year every year.

41. Your lowest scenario is very unrealistic. You can't possibly effect only low

value crops under any circumstance.

42. Prorata assumptions are unrealistic and shouldn't be included. Need to look at both physical and legal constraints.

43. The fundamental approach of the RIA is flawed.

44. Water transfers rely on use of GW, conjunctive use programs are starting in agriculture but the urban areas can do alot more with conjunctive use.

45. There was an overvaluation of recreational fisheries due to the use of multipliers and contingent valuation.

46. Contingent valuation could also be used for agriculture. There have been several surveys completed that found that consumers were willing to pay for California produce because they knew that pesticide regulations were strict compared to imported food.

47. Critical habitat analysis is incorrect because it didn't include all the impacts on water supply from the various measures.

48. Water supply numbers don't acknowledge DWR's position on the water supply impacts.

49. The baseline currently includes 1 maf and that doesn't include take limits from the ESA opinions.

50. There is a large possibility that the winter-run storage requirements and the CWA requirements will not both be possible.

51. Benefits are overestimated, there should not be any qualitative discussion on things that aren't proven.

52. Negative impacts on warmwater fisheries in reservoirs haven't been considered.

53. Next steps. Several participants indicated that they were currently overloaded with trying to keep abreast of all the policy changes. No decision was made on any followup to the meeting.